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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,899	08/20/2003	Masashi Kisaka	JP920020128US1	8195
7590	03/18/2005		EXAMINER	
William D. Gill IBM Corporation Intellectual Property Law 5600 Cottle Road ( L2PA/010) San Jose, CA 95193			TZENG, FRED	
			ART UNIT	PAPER NUMBER
			2651	
			DATE MAILED: 03/18/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/645,899	KISAKA, MASASHI
	<b>Examiner</b>	<b>Art Unit</b>
	Fred Tzeng	2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 20 August 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-9 and 11-13 is/are rejected.  
7)  Claim(s) 10 and 14 is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 20 August 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: .

## DETAILED ACTION

1. Claims 1-14 are presented for examination.

### *Specification*

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9, 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Galloway et al (USPN 6,765,749), hereafter as Galloway.

RE claims 1 and 11, Galloway discloses a data storage device (see column 3 lines 27-29) comprising: an actuator for supporting and moving a head for reading and writing data with respect to a recording medium (see column 3 lines 29-33 or column 1

lines 26-30 or column 5 lines 46-49); a servo control unit for feeding back a position error signal obtained by scanning the recording medium by the head to control an operation of the actuator (see column 5 lines 20-28 or column 3 lines 33-35 and column 1 lines 46-57); a notch filter for reducing a gain of a preset center frequency component from a servo signal transmitted from the servo control unit (see column 2 lines 46-57); deviation detecting means for detecting deviation of a resonance frequency of the actuator from a center frequency set in the notch filter (see column 6 lines 61-67 and column 7 lines 1-17); and changing means for changing a set value of the center frequency set in the notch filter based on a result of the deviation detection by the deviation detecting means (see column 8 lines 1-28 and figure 10).

RE claims 2-6, 12 and 13, Galloway discloses that the deviation detecting means comprises: a band-pass filter for passing a center frequency component corresponding to the resonance frequency from the servo signal transmitted from the servo control unit (see column 2 lines 46-57); a phase shifter for receiving a signal containing the resonance frequency as an input, and for shifting a phase at the resonance frequency of the signal by a predetermined amount (see column 6 lines 13-33 or column 9 lines 1-5); and a multiplier for multiplying the signal passed through the band-pass filter by the signal passed through the phase shifter (see column 6 lines 10-12).

Claims 7-9 are the method steps associated with the apparatus of claims 1-6, 11-13 and therefore are rejected on the same basis as the apparatus claims.

***Allowable Subject Matter***

5. Claims 10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication from the examiner should be directed to Fred Tzeng whose telephone number is 703-305-4841. The examiner can normally be reached on weekdays from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-5710 for After Final communications.

8. Informal regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred F. Tzeng



March 06, 2005



DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600